

IN THE CLAIMS

Please amend the claims as listed below:

Complete listing of claims.

1 - 12 Canceled

13. (Currently Amended) A stent for implantation in or around a hollow organ, comprising:

said stent being defined by a plurality of adjacently positioned ring shaped elastic wall segments along a length of said stent between a first and second end, each said wall segment having a radial elastic structure, said wall segments comprising spring devices;

gaps separating said wall segments;

connector devices in a communication across said gaps linking adjacently positioned spring devices upon each of said wall segments;

said connector devices aligning along ~~a length of~~ said stent to form at least one continuous longitudinal flange extending uninterrupted between said first and second end consisting of said connector devices and respective said spring devices upon each adjoining said wall segment which are substantially aligned with each said connector device communicating therebetween; and

~~said continuous longitudinal flange flange having said spring devices included therein thereby said flange providing means to maintain said length of said stent under tensile or compressive stress; and~~

~~said connector devices having a width or a thickness, said width or thickness being larger than adjoining said spring devices.~~

14. (Currently Amended) A stent according to Claim 13, characterized by the fact that the spring devices defining said wall segments have first and second spring devices; and

said first spring devices and said second spring devices are arranged in alternate fashion at an angle to each other, and said continuous longitudinal flange is formed of connector devices connected between substantially aligned first spring devices of adjoining wall segments, or, of connector devices connected between substantially aligned said second spring devices of adjoining wall segments.

15. (Previously Presented) A stent according to Claim 14, characterized by the fact that the first spring devices and second spring devices are substantially rectilinear.

16. (Canceled)

17. (Canceled)

18. (Previously Presented) A stent according to claim 13 of the previous claims, characterized by the fact that several longitudinal flanges are parallel to each other in a projection onto an external periphery area of said stent arranged in a direction of the periphery, at distances from each other.

19. (Previously Presented) A stent according to claim 14 of the previous claims, characterized by the fact that several longitudinal flanges are parallel to each other in a projection onto an external periphery area of said stent arranged in a direction of the periphery, at distances from each other.

20. (Previously Presented) A stent according to claim 15 of the previous claims, characterized by the fact that several longitudinal flanges are parallel to each other in a projection onto an external periphery area of said stent arranged in a direction of the periphery, at distances from each other.

21. (Canceled)

22. (Currently Amended) A stent according to claim 14, characterized by the fact that said first spring devices and said second spring devices have a substantially equal width and said connector devices have a connector width which is at least twice as wide as said width of said first spring devices and said second spring devices.

23. (Currently Amended) A stent for implantation in or around a hollow organ, comprising:

said stent formed as a unitary structure from a shape memory material, said unitary structure being expandable upon deployment in said organ;

said unitary structure being a tube shaped body defined by a sidewall surrounding an axial interior along a length, said sidewall having voids formed therein defining a plurality of adjacently positioned ring shaped elastic wall segments, each having a radial elastic structure,

each said elastic wall segment formed of first and second spring devices arranged in alternate fashion at an angles to each other;

said voids defining gaps separating said wall segments,
connector devices in a communication across said gaps
linking in-between adjacently positioned and substantially aligned first or second spring devices of said wall segments;

said connector devices aligning along a length of said body between a first of said segments at one end of said body to a last of said segments at an opposite end, to form at least one continuous uninterrupted longitudinal flange comprised of said connector devices and adjacent respective first or second spring devices;

said flange providing means to maintain said length of said stent under tensile or compressive stress.

24. (Previously Presented) A stent according to claim 23 wherein said unitary structure is expandable upon a deployment in said organ using a balloon catheter.

25. (Previously Presented) A stent according to claim 13, characterized by the fact that said stent it is made of a shape memory material, and may be self expanded for a deployment in said organ.

26. (Previously Presented) A stent according to claim 13 characterized by the fact that said stent is made of stainless steel, plastic or a self-dissolving material.

27. (Previously Presented) A stent according to claim 13 wherein the said periphery is machined to a smooth or polished surface.